

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

RECEIVED
AUG 31 1998
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Amendment of Section 73.202(b))
Table of Allotments) MM Docket No. 98-107
FM Broadcast Stations) RM-9288
(Gaylord, Michigan))

To: Chief, Allocations Branch
Policy and Rules Division
Mass Media Bureau

COMMENTS AND COUNTER-PROPOSAL
OF NORTHERN CHRISTIAN RADIO, INC.

Northern Christian Radio, Inc. (hereafter "NCR"), by its attorney and pursuant to the provisions of Section 1.415 of the Commission's Rules and Regulations, hereby respectfully submits these comments and a counter-proposal in response to the NOTICE OF PROPOSED RULE MAKING, DA 98-1287, in the above-captioned proceeding.¹

¹ Released July 10, 1998; Comment Date: August 31, 1998.

6 + 5

1. NCR is the Commission licensee of noncommercial, educational FM station WHPN(FM), Gaylord, Michigan. NCR desires to operate a second noncommercial FM station at Gaylord in order to provide alternative noncommercial, educational programming to that presently carried on WHPN(FM). However, as is demonstrated in the attached engineering study by NCR's consultants, Lechman & Johnson, Inc. (hereafter "Lechman"), there are no reserved band, noncommercial, educational FM channels available for use by NCR in the Gaylord, Michigan area. This is due to three factors.

2. The transmitter site for VHF Television Channel 6 station WCML(TV), Alpena, Michigan, is located 42.3 kilometers from Gaylord. The technical requirements of Section 73.525 of the Commission's Rules and Regulations greatly limit the availability and use of channels in the portion of the FM band reserved for noncommercial educational use in areas adjacent to VHF Television Channel 6 stations such as WCML(TV). In fact, as shown in the Lechman engineering study FM channels 201 through 204 are entirely eliminated from use by NCR at Gaylord due to the

VHF Television Channel 6 interference protection accorded to such stations pursuant to Section 73.525 of the Commission's Rules. See Table IV to the Lechman engineering study.

3. In addition, Gaylord, Michigan is within 320 kilometers of the United States border with Canada. As shown in the Lechman engineering study, the utilization of reserved band FM channels by Canadian stations, and in conformity with the various treaties between Canada and the United States, further eliminates a number of reserved band, noncommercial FM channels that would otherwise be available for use in Gaylord.

4. Finally, there are a several noncommercial FM channels presently licensed by the Commission for use in communities distant, but adjacent, to Gaylord. See Table V-A & Table V-B for tabulations on the coverage contours of noncommercial FM stations in adjacent communities. These noncommercial FM stations, and the interference protection they are provided under the Commission's Rules and Regulations, eliminate the remainder of the noncommercial channels that might be utilized by NCR in

Gaylord were it not for the limitations caused by the proximity of Gaylord to the United States-Canada border and WCML(TV).

5. Therefore, as summarized in Table II to the Lechman engineering study, NCR is wholly precluded from the use of any additional reserved band, noncommercial FM channel at Gaylord, Michigan. NCR would note that noncommercial, educational stations generally operate within the reserved portion of the FM band (Channels 201-220). However, the Commission has in the past consistently made assignments of channels in the non-reserved portion of the FM band, and reserved those assignments for noncommercial educational use, where channels in the reserved band are not otherwise available because of foreign allocations (Canadian or Mexican) or potential interference to operations on VHF Television Channel 6. See, McMillan and Sault Ste. Marie, Michigan, DA 98-934 (released May 22, 1998). In the case at hand, both Canadian allocations and VHF Television Channel 6 restrictions severely limit the availability of reserved band noncommercial educational FM channels at Gaylord. Accordingly, this is a particularly appropriate case under the aforementioned

policy for the allocation of a non-reserved FM channel to Gaylord and its reservation for noncommercial, educational use.

6. NCR, therefore, desires the allocation of a channel in the non-reserved, or commercial, portion of the FM band to Gaylord the designation thereof for noncommercial, educational use. NCR has ascertained that there is only one such FM channel that can be allocated to Gaylord in conformity with the Commission's minimum distance requirements, and without a site restriction. That is FM Channel 268A. Accordingly, NCR respectfully requests that FM Channel 268A be allocated to Gaylord, Michigan, and reserved for noncommercial, educational use.

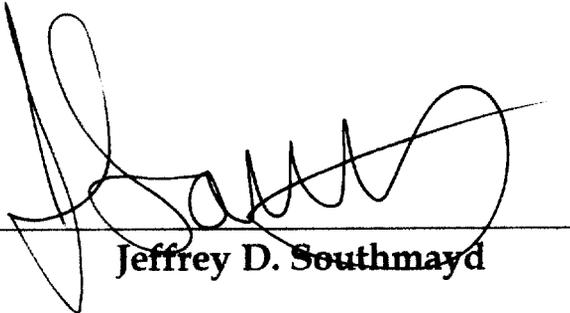
7. In the event the Commission makes the requested assignment of FM Channel 268A to Gaylord, NCR will file an application seeking a construction permit to build and operate a noncommercial, educational FM station thereon. Upon a grant of the construction permit, NCR will promptly build the FM Channel *268A noncommercial station in conformity with the construction permit issued by the Commission, and will promptly place the station into operation.

WHEREFORE, based on the foregoing, Northern Christian Radio, Inc. respectfully requests that the Commission amend the FM Table of Allotments contained in Section 73.202(b) of the Commission's Rules as follows:

<u>Community</u>	<u>Channel No.</u>	
	<u>Present</u>	<u>Proposed</u>
Gaylord, Michigan	237A, 294C1	237A, 294C1, *268A

Respectfully submitted,

Northern Christian Radio, Inc.

By: 

Jeffrey D. Southmayd

Its Attorney

Southmayd & Miller
1220 Nineteenth Street, N.W.
Suite 400
Washington, D.C. 20036
(202) 331-4100

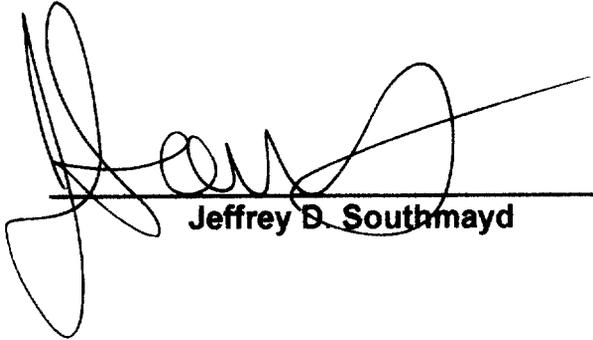
Date: August 31, 1998

CERTIFICATE OF SERVICE

I, Jeffrey D. Southmayd, do hereby certify that the foregoing **COMMENTS AND COUNTER-PROPOSAL OF NORTHERN CHRISTIAN RADIO, INC.** were served by first class United States mail, postage pre-paid, on this 31st day of August 1998 on the following:

**Mr. John A. Karousos
Chief, Allocations Branch
Policy and Rules Division
Mass Media Bureau
Federal Communications Commission
2000 M Street, N.W.
Room 554
Washington, D.C. 20554**

**Alan C. Campbell, Esquire
Irwin, Campbell & Tannenwald, P.C.
1730 Rhode Island Avenue, N.W.
Suite 200
Washington, D.C. 20036-3101
Counsel to Darby Advertising, Inc.**



Jeffrey D. Southmayd

**COUNTER PROPOSAL TO
MM DOCKET NO. 98-107, RM-9288**

**Prepared For
NORTHERN CHRISTIAN RADIO, INC.**

August 21, 1998

Lechman & Johnson, Inc.

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DECLARATION

ENGINEERING STATEMENT

Peter W. Lechman says that he is an engineer and President of Lechman & Johnson, Inc., Telecommunications consultants, with offices located at 9049 Shady Grove Court, Gaithersburg, Maryland 20877 and that his qualifications are a matter of record with the Federal Communications Commission.

That the firm of Lechman & Johnson, Inc. has been retained by Northern Christian Radio, Inc., to prepare this Engineering Statement in support of a counter proposal to MM Docket No. 98-107, RM-9288 to assign FM Channel 268A to Gaylord, Michigan. In the Notice of Proposed Rule Making, the amendment of Section 73.202(b) of the TABLE of Allotments are as follows:

<u>Community</u>	<u>Present Allocations</u>	<u>Proposed Allocations</u>
Gaylord, MI	237A, 294C1	268A, 294C1

Northern Christian Radio, Inc. proposes to amend Section 73.202(b) of the TABLE of FM Allotments and reserve the channel for non-commercial use only. The amendment is as follows:

<u>Community</u>	<u>Present Allocations</u>	<u>Proposed Allocations</u>
Gaylord, MI	237A, 294C1	237A, 268A, 294C1

TABLE I is an FM channel study listing all existing stations, applications, allocations and proposed rulemakings of co-channel and adjacent channel assignments pertinent to allocating Channel 268A to Gaylord, MI without any site restrictions. The references coordinates of Gaylord are as follows:

North Latitude: 45° 01' 40"
West Longitude: 84° 40' 35"

To support this amendment of the FM TABLE of Allotments, a detailed FM study was evaluated of the NCE-FM reserved band (Channels 201-220) to determine if any of the 20 FM channels are workable at Gaylord. The results of that study are as follows.

TABLE II is a summary sheet listing the reserve FM channels in the NCE-FM band and the interfering FM channels that preclude the use of these channels.

Lechman & Johnson, Inc.

DECLARATION
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TABLE III are copies of the FM channel studies of the NCE-FM bands using Gaylord as the point of origin.

Gaylord is located 42.3 km from WCML(TV), Channel 6, Alpena, Michigan. Section 73.525 of the Rules and Regulations sets forth technical requirements that must be met to assign a NCE-FM channel near a Channel 6 TV station.

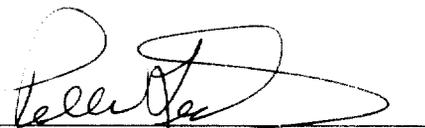
TABLE IV is computational data associated with determining the impact on WCML(TV). Channels 201A and 204A were the only two channels evaluated since Channels 201 through 204 were the only channels on TABLE II that were not excluded because the proposed transmitter site did not lie within the protected contour of another FM station. As shown on TABLE IV, using best case scenario, a Class A facility does not meet the Commission's population criteria set forth in Section 73.525 of the Rules and Regulations.

TABLE V-A and V-B is a tabulation of distances to the computed undesired FM contours for Channel 201A and Channel 204A.

As clearly demonstrated and shown above, there are no non-commercial FM channels available to Gaylord.

I declare under penalty of perjury that the foregoing is true and correct.

LECHMAN & JOHNSON, INC.



Peter W. Lechman
Consulting Engineer
August 21, 1998

Lechman & Johnson, Inc.

TABLE 1

***** FM CHANNEL STUDY NO. 1 - LECHMAN & JOHNSON, INC. GAITHERSBURG, MARYLAND - 20-AUG-98 18:24:45 *****
 ***** LAST UPDATE 980817 *****

NEW 268 A FM POLARIZATION ERP (KW) HAAT RCANSL
 GAYLORD MI US HORIZONTAL 6.000 0.000 (METER) (METER)
 45.0140 84.4035 (D.MMSS) VERTICAL 6.000 0.000 100.0

THE FOLLOWING CONTOURS ARE CALCULATED USING: CALCULATED HAAT FROM TOPO DATA BASE
 ERP= 6.000 (KW) 7.8 (DBK) HAAT= 100.0 (METERS)

INTERFERING	DOMESTIC		AZIMUTH	HAAT	HAAT	CONTOURS (KM)			
	DBU	KM				DBU	KM	70 DBU	60 DBU
CD CHANNEL (40.0)	86.7	(34.0)	98.9	0.0	125.7	412.3	18.3	31.3	42.4
1ST ADJACENT (54.0)	43.7	(48.0)	35.0	45.0	136.5	447.7	19.1	32.5	43.9
2ND ADJACENT (80.0)	9.1	(74.0)	7.0	90.0	114.7	376.4	17.5	30.1	40.9
3RD ADJACENT (100.0)	2.6	(94.0)	2.3	135.0	107.1	351.4	16.8	29.2	39.8
				180.0	81.1	266.2	14.4	25.6	35.3
				225.0	83.0	272.5	14.6	25.9	35.6
PROTECTED (60.0)	28.3	(54.0)	38.7	270.0	71.3	233.9	13.5	24.2	33.2
				315.0	80.5	264.3	14.3	25.6	35.1
CITY GRADE (70.0)	16.2			AVERAGE	100.0	328.1	16.2	28.3	38.7

EST SITE ELEVATION : 410.5 m.; 1346.7 ft.
 EST RAD CENTER AGL : 82.5 m.; 270.5 ft.
 RAD CENTER A.M.S.L.: 492.9 m.; 1617.2 ft.

 THE CANADIAN BORDER IS 121.4 KM ON A BEARING OF 43.4 DEG. TRUE

AZIMUTH	LAT	LONG	ERP (KW)	HAAT	I-CON	F-CON	IR	IC	REZLT
FROM TO CALL STS	FILE NUMBER	CITY	ST C	(D.MMSS)	REL CHN	HORZ VERT	(M)	A F5010 F5050	DIST RSEP RSEP IR IC
						(KM) (KM)	(KM) (KM)	(KM) (KM)	(KM)
296.8 116.5 WIZY LIC	BLH890703KA	East Jord MI A	45.1040	85.0557	3RD 265A	2.80H2.80V	149		37.2 31.0 C
COMMENTClass B1 with respect to Canada									
181.4 1.4 WQON LIC	BLH900322KB	Roscommon MI A	44.3415	84.4132	2ND 266A	3.40H3.40V	135		50.8 31.0
COMMENTClass B1 with respect to Canada									
8.3 188.5 WSUE LIC	BLH7453	Sault Ste MI A	46.2616	84.2245	1ST 267C1	90.H 90.V	67		158.4 133.0
234.9 53.8 WXYQ LIC	BLH940630KE	Manistee MI A	44.1219	82.1722	3RD 268A	6.0H 6.0V	35		157.3 115.0
COMMENTAccepted by Canada on 921013									
235.3 54.2 WXYQ CP	BPH980624IR	Manistee MI A	44.1241	86.1753	3RD 268A	6.0H 6.0V	80		157.5 115.0
100.2 280.2 WMJZFM ADD	RM9288	Gaylord MI A	45.0133	94.3940	3RD 268A	H V			1.2 115.0 *** S
COMMENTProposed as Class A to Canada 980615									
289.7 107.3 WJNRFM LIC	BLH940815KC	Iron Moun MI A	45.4915	88.0238	3RD 268C1	100.H100.V	187		277.9 200.0
45.8 227.3 ADD		Elliot La ON C	46.2316	82.3718	1ST 269B	H V			220.1 149.0
COMMENTCANADIAN PROPOSAL									
250.7 70.0 WLDR LIC	BLH920403KB	Traverse MI A	44.4613	85.4143	2ND 270C1	100.H100.V	192		85.4 75.0

 *** 'MX' COUNTER PROPOSAL TO ASSIGN CHANNEL 268A TO GAYLORD AND RESERVE THE CHANNEL FOR NON COMMERCIAL USE. *****

TABLE II
NCE-FM CHANNEL STUDY
SUMMARY SHEET

GAYLORD, MICHIGAN

Ref. Site: N 45° 01' 40" / W 84° 40' 35"

<u>Proposed Channel</u>	<u>Interfering Channel</u>	<u>Station/City/State</u>	<u>Comments</u>
201A	201B	CBON18, Sault Ste. Marie, ON	Short
202A	202C2	CP, White Star, MI	IR, IC
	203A	Applic., Mackinaw, MI	IR, IC
203A	203A	Applic., Mackinaw, MI	IR, IC
	204C	WIAA, Interloch, MI	IR, IC
204A	203A	Applic., Mackinaw, MI	IR, IC
	204C	WIAA, Interloch, MI	IR, IC
	207C2	WTLI, Bear Creek Township, MI	W
205A	207C2	WTLI, Bear Creek Township, MI	W
206A	207C2	WTLI, Bear Creek Township, MI	W
207A	207C2	WTLI, Bear Creek Township, MI	W
208A	207C2	WTLI, Bear Creek Township, MI	W
209A	207C2	WTLI, Bear Creek Township, MI	W
210A	207C2	WTLI, Bear Creek Township, MI	W
	213C	WPHN, Gaylord, MI	W
211A	213C	WPHN, Gaylord, MI	W
212A	213C	WPHN, Gaylord, MI	W
213A	213C	WPHN, Gaylord, MI	W
214A	213C	WPHN, Gaylord, MI	W
215A	213C	WPHN, Gaylord, MI	W
216A	213C	WPHN, Gaylord, MI	W
	219C	WCML, Alpena, MI	W

TABLE II

217A	219C	WCML, Alpena, MI	W
218A	219C	WCML, Alpena, MI	W
219A	219C	WCML, Alpena, MI	W
220A	219C	WCML, Alpena, MI	W

Codes: Short - Does not meet spacing requirements
IR - Interference Received
IC - Interference Caused
W - Transmitter site located within interfering station's 60 dBu contour

TABLE III

Lehman & Johnson, Inc.

***** FM CHANNEL SEARCH NO. 1 - LECHMAN & JOHNSON, INC. GAITHERSBURG, MARYLAND - 20-AUG-98 19:03:08 *****
 ***** LAST UPDATE 980817 *****

NEW 201 A FX POLARIZATION ERP (KW) HAAT RCANSL
 GAYLORD MI US HOR PLN BK TILT (METER) (METER)
 45.0140 84.4035 (D.MMSS) HORIZONTAL 5.000 0.000 100.0
 VERTICAL 5.000 0.000 100.0

THE FOLLOWING CONTOURS ARE CALCULATED USING: CALCULATED HAAT FROM TOPD DATA BASE
 ERP= 6.000 (KW) 7.8 (DBK) HAAT= 179.9 (METERS) 34 DEG_TRUE

INTERFERING	DOMESTIC		AZIMUTH DEGREES	HAAT (METERS)	HAAT (FEET)	CONTOURS (KM)			
	DBU	KM				70 DBU	60 DBU	54 DBU	
CO CHANNEL (40.0)	98.2	(34.0)	98.9	0.0	125.7	412.3	18.3	31.3	42.4
1ST ADJACENT (54.0)	55.1	(48.0)	35.0	45.0	136.5	447.7	19.1	32.5	43.8
2ND ADJACENT (80.0)	12.2	(74.0)	7.0	90.0	114.7	376.4	17.5	30.1	40.9
3RD ADJACENT (100.0)	3.5	(94.0)	2.3	135.0	107.1	351.4	16.8	29.2	39.8
				180.0	81.1	266.2	14.4	25.6	35.3
				225.0	83.0	272.5	14.6	25.9	35.6
PROTECTED (60.0)	37.2	(54.0)	49.0	270.0	71.3	233.9	13.5	24.2	33.2
				315.0	80.5	264.3	14.3	25.6	35.1
CITY GRADE (70.0)	21.8			AVERAGE	100.0	328.1	16.2	28.3	38.7

EST SITE ELEVATION : 410.5 m.; 1346.7 ft.
 EST RAD CENTER AGL : 82.5 m.; 270.5 ft.
 RAD CENTER A.M.S.L.: 492.9 m.; 1617.2 ft.

***** CONTOUR CALCULATIONS BASED UPON MAXIMUM HAAT *****

* TV CHANNEL & STUD *
 * GRADE B = 47 DBU *

AZIMUTH (DEGREES)	CALL	TV	TV	TV	FMTOTV	FMTOTV	FMRP	TVATFM					
(DEGREES)	CALL	LATITUDE	LONGITUDE	ERP	HAAT	GRADEB	DIST	RQDIST	CO-LO	F5050			
	SIGN	DB,MMSS	DD,MMSS	(KW)	(METER)	(KM)	(KM)	(KM)	(KW)	(DBU)			
174.6	354.8	WLNSTV	BLCT652	TVLIC	LANSING MI A	42.4114	84.2235	100	308.	104.2	261.2	265.0	15.3
72.9	253.3	WCML	BLET394	TVLIC	ALPENA MI A	45.0817	84.0944	100	475.	118.1	42.3	265.0	78.4
301.7	119.4	WLUCTV	BLCT2255	TVLIC	MARQUETTE MI A	46.2011	87.5055	100	333.	106.1	286.8	265.0	11.8

THE CANADIAN BORDER IS 121.4 KM ON A BEARING OF 43.4 DEG. TRUE

AZIMUTH FROM	AZIMUTH TO	CALL	STS	FILE NUMBER	CITY	ST C	LAT (D.MMSS)	LONG	SEL CHN	ERP (KW) HBRZ	HAAT (M) VERT	D I-CON	F-CON	IR	IC	REZLT	
							(D.MMSS)				(M)	(KM)	(KM)	(KM)	(KM)	(KM)	
202.3	21.7	NEW	APP	BPED980505MC	Rosers He	MI A	43.3759	85.2753	00	201A	0.1H 0.1V	79	30.5	9.2	167.2	67.7	107.4
9.8	190.1	CBON18	OPE		Sault Ste	ON C	46.3550	84.1653	00	201B	1.70H1.70V	67			177.1	223.	S
COMMENTProposed as Class B by Canada 951122-Accepted by Commission 95																	
175.1	355.2	NEW	CP	BPED950223MD	White Sta	MI A	43.5718	84.3257	00	20202	.050H30.00	177	75.0	50.8	119.6	112.2	105.9
COMMENTAmended 970312																	
2.6	182.6	NEW	APP	BPED971230MA	Mackinaw	MI A	45.4000	84.3805	2NB	203A	H 4.6V	127	9.6	29.6	71.1	46.8	41.8
CUT-OFF DATE = 09/09/98 **COMMENTAmended 980810-HAAT must be less than or equal to th																	
224.8	44.1	WIAA	LIC	BLED900105KB	Interloch	MI A	44.1633	85.4249	3RD	204C	100.H100.V	402	11.6	79.9	117.3	48.8	83.4

***** FM CHANNEL SEARCH NO. 2 - LECHMAN & JOHNSON, INC. BAITHERSBURG, MARYLAND - 20-AUG-98 19:04:25 *****
 ***** LAST UPDATE: 980817 *****

NEW	202 A	FX	POLARIZATION	ERP (KW)		HAAT	RCANSL
				HOR PLN	BM TILT	(METER)	(METER)
GAYLORD MI	US		HORIZONTAL	6.000	0.000	100.0	
45.0140	84.4035	(D.MMSS)	VERTICAL	6.000	0.000	100.0	

***** CONTOUR CALCULATIONS BASED UPON MAXIMUM HAAT *****

 * TV CHANNEL & STUDY *
 * GRADE B = 47 DBU *

AZIMUTH	CALL	FILE NUMBER	SERV STAT	CITY	ST C	DD,MMSS	DD,MMSS	ERP (KW)	HAAT	TV	TV	TV	FMTOTV	FMTOTV	FMRP	TVATFM
(DEGREES)										GRADEB	DIST	RQDIST	CO-LD	F5050		
174.6	354.8	WLNSTV	BLCT652	TVLIC	LANSING	MI A 42.4114	84.2235	100	308.	104.2	261.2	257.0				15.3
72.9	253.3	WCML	BLET394	TVLIC	ALPENA	MI A 45.0817	84.0944	100	475.	118.1	42.3	257.0				78.4

 THE CANADIAN BORDER IS 121.4 KM ON A BEARING OF 43.4 DEG. TRUE

AZIMUTH	FROM	TO	CALL	STS	FILE NUMBER	CITY	ST C	LAT	LONG	REL CHN	ERP (KW)	HAAT	D	I-CON	P-CON	IR	IC	REZLT			
								(D.MMSS)			HORZ	VERT	(M)	A	F5010	F5050	DIST	RSEP	RSEP	IR	IC
															(KM)	(KM)	(KM)	(KM)	(KM)		
9.8	190.1		CBON18	OPE		Sault Ste	ON C	46.3550	84.1653	1ST 201B	1.70H	1.70V	67				177.1	149.			
COMMENTProposed as Class B by Canada 951122-Accepted by Commission 95																					
175.1	355.2		NEW	CP	BPED950223ND	White Sta	MI A	43.5718	84.3257	00 20202	.050H	30.0V	177	129.9	50.8	119.6	167.1	149.0	S	S	
COMMENTAmended 970312																					
2.6	182.6		NEW	APP	BPED971230MA	Mackinaw	MI A	45.4000	84.3805	1ST 203A	H 4.6V		127	45.3	29.6	71.1	82.5	84.7	S	S	
CUT-OFF DATE = 09/09/98 **COMMENTAmended 980810-HAAT must be less than or equal to th																					
224.8	44.1		WIAA	LIC	BLED900105KB	Interloch	MI A	44.1633	85.4249	2ND 204C	100.H	100.V	402	39.9	79.9	117.3	77.1	92.1			

*** NORMAL TERMINATION FM CHANNEL SEARCH NO. 2 *** 60 FM RECORDS WERE CONSIDERED, OF WHICH 4 WERE PRINTED ABOVE ***

***** FM CHANNEL SEARCH NO. 3 - LECHMAN & JOHNSON, INC. GAITHERSBURG, MARYLAND - 20-AUG-98 19:04:52 *****
 ***** LAST UPDATE: 980817 *****

NEW 203 A FX POLARIZATION ERP (KW) HAAT RCAMSL
 GAYLORD MI US HOR FLW RM TILT (METER) (METER)
 45.0140 84.4035 (D.MMSS) HORIZONTAL 6.000 0.000 100.0
 VERTICAL 6.000 0.000 100.0

***** CONTOUR CALCULATIONS BASED UPON MAXIMUM HAAT: *****

 * TV CHANNEL & STUDY *
 * GRADE B - 47 DBU *

AZIMUTH (DEGREES)	CALL	LATITUDE	LONGITUDE	TV ERP (KW)	TV HAAT METER	TV GRADE (KM)	FMTOTV DIST (KM)	FMTOTV RODIST (KM)	FMRP DBU	TVATFM (DBU)
174.6	354.8 WLNSTV	BLCT652	TULIC LANSING MI A 42.4114	84.2235	100	308.104.2	261.2	246.0	15.3	
72.9	253.3 WCML	BLET394	TULIC ALPENA MI A 45.0817	84.0944	100	475.118.1	42.3	246.0	78.4	

 THE CANADIAN BORDER IS 121.4 KM ON A BEARING OF 43.4 DEG. TRUE

AZIMUTH FROM TO	CALL	STS	FILE NUMBER	CITY	ST C	LAT (D.MMSS)	LONG (D.MMSS)	REL CHN	ERP (KW) HORZ VERT	HAAT (M) (H)	I-CON A	P-CON F5010 F5050	IR DIST (KM)	IC RSEP (KM)	REZLT RSEP (KM) IR IC
175.1	355.2	NEW	CP	BPED950223MD	White Sta	MI A 43.5718	84.3257	1ST 202C2	6.0H 30.0V	177	75.0	50.8	119.6	112.2	105.9 C
COMMENTAmended 970312															
137.8	318.9	NEW	APP	BPED980505MD	Gasetown	MI A 43.4530	83.9551	00 203A	6.0H 6.0V	124	90.5	31.2	189.0	127.7	129.4
267.2	85.3	WAZH	CP	BPED961219MT	Sturgeon	WI A 44.5414	87.2213	00 203C1	50.0H 50.0V	177	141.3	55.3	213.0	178.5	153.5
COMMENTProposed as Class C1 to Canada 971006-Accepted by Canada 97132															
2.6	182.6	NEW	APP	BPED971230MA	Mackinaw	MI A 45.4000	84.3800	00 203A	H 4.6V	127	36.9	29.6	71.1	124.1	127.8 S S
CUT-OFF DATE = 09/09/98 **COMMENTAmended 980810-HAAT must be less than or equal to th															
224.8	44.1	WIAA	LIC	BLED900105KB	Interloch	MI A 44.1633	85.4249	1ST 204C	100.0H 100.0V	402	118.6	79.9	117.3	155.8	135.0 S S

 *** NORMAL TERMINATION FM CHANNEL SEARCH NO. 3 *** 64 FM RECORDS WERE CONSIDERED, OF WHICH 5 WERE PRINTED ABOVE ***

***** FM CHANNEL SEARCH NO. 4 - LECHMAN & JOHNSON, INC. GAITHERSBURG, MARYLAND - 20-AUG-98 19:05:25 *****
 ***** LAST UPDATE: 980817 *****

NEW	204 A	FX	POLARIZATION	ERP (KW)	HAAT	RCAMSL
GAYLORD MI	US			HOR PLN	BM TILT	(METER)
45.0140	84.4035	(D.MMSS)	HORIZONTAL	6.000	0.000	100.0
			VERTICAL	6.000	0.000	100.0

***** CONTOUR CALCULATIONS BASED UPON MAXIMUM HAAT *****

 * TV CHANNEL & STUDY *
 * GRADE B = 47 DBU *

AZIMUTH	CALL	FILE NUMBER	SERV STAT	CITY	ST C	DD.MMSS	DD.MMSS	ERP (KW)	HAAT METER	TV GRADE B (KM)	TV DIST (KM)	FMTOTV RQDIST (KM)	FMRP (KW)	TVATFM CO-LO	F5050 (DBU)
72.9	253.3	WCML	BLET394	TVLIC	ALPENA	MI A	45.0817	84.0944	100	475.118.1	42.3	235.0			76.4

 THE CANADIAN BORDER IS 121.4 KM ON A BEARING OF 43.4 DEG. TRUE

AZIMUTH	FROM	TO	CALL	STS	FILE NUMBER	CITY	ST C	LAT (D.MMSS)	LONG (D.MMSS)	REL CHN	ERP (KW)	HAAT (M)	D I-CON	F-CON	IR	IC	REZLT	
2.6	182.6	NEW	APP	BPED971230MA	Mackinaw	MI A	45.4000	84.3805	1ST 203A	H	4.6V	127	45.3	29.6	71.1	82.5	84.7	S S
CUT-OFF DATE = 09/09/98 **COMMENTAmended 980810-HAAT must be less than or equal to th																		
224.8	44.1	WIAA	LIC	BLED900105KB	Interloch	MI A	44.1633	85.4249	00 204C	100.H100.V	402	183.1	79.9	117.3	220.3	178.1	S S	
32.4	213.2		VAC		Thessalon	ON C	46.1500	83.3300	1ST 205B	H	?	0			161.7	149.		
339.7	159.6	WTLI	CP	BPED961122MA	Bear Cree	MI A	45.1012	84.4504	3RD 207C2	H	6.0V	393	4.5	51.1	16.9	41.7	54.6	W W
COMMENTVertical Polarization Only																		

 *** NORMAL TERMINATION FM CHANNEL SEARCH NO. 4 *** 76 FM RECORDS WERE CONSIDERED, OF WHICH 4 WERE PRINTED ABOVE ***

***** FM CHANNEL SEARCH NO. 5 -- LECHMAN & JOHNSON, INC. GAITHERSBURG, MARYLAND - 20-AUG-98 19:06:01 *****
 ***** LAST UPDATED: 990817 *****

NEW	205 A	FX	POLARIZATION	ERP (KW)	HAAT	RCAMSL
GAYLORD MI	US			HOR PLN	Bm TILT	(METER)
45.0140	84.4035 (D.MMSS)		HORIZONTAL	6.000	0.000	100.0
			VERTICAL	6.000	0.000	100.0

***** CONTOUR CALCULATIONS BASED UPON MAXIMUM HAATs *****

 * TV CHANNEL 6 STUDY *
 * GRADE B = 47 DBU *

AZIMUTH	CALL	FILE NUMBER	SERV STAT	CITY	ST C	DD.MMSS	DDD.MMSS	ERP (KW)	HAAT METER	TV GRADEB (KM)	TV FMTOTV DIST (KM)	FMTOTV RQDIST (KM)	FMRFP (KW)	TVATFM CO-LO (DBU)
72.9	253.3 WCML	BLET394	TVLIC	ALPENA	MI A	45.0817	84.0944	100	475.	118.1	42.3	225.0		78.4

 THE CANADIAN BORDER IS 121.4 KM ON A BEARING OF 43.4 DEG. TRUE

AZIMUTH	FROM	TO	CALL	STS	FILE NUMBER	CITY	ST C	LAT (D.MMSS)	LONG (D.MMSS)	REL	ERP (KW)	HAAT (M)	D I-CON (KM)	P-CON (KM)	IR (KM)	IC (KM)	REZLT		
2.6	182.6	NEW	APP	BPED971230MA	Mackinaw	MI A	45.4000	84.3805	2ND	203A	H	4.6V	127	9.6	39.6	71.1	46.8	41.8	
CUT-OFF DATE = 09/09/98 **COMMENTAmended 980810-HAAT must be less than or equal to th																			
224.8	44.1	WIAA	LIC	BLED900105KB	Interloch	MI A	44.1633	85.4249	1ST	204C	100.H	100.V	402	118.6	79.9	117.3	155.8	135.0	S S
32.4	213.2		VAC		Thessalon	ON C	46.1500	83.3300	00	205B	H	U	0			161.7	223.		S
156.5	337.1		VAC		Bay City	MI A	43.3714	83.5001	1ST	206B	H	V	0	78.1	52.2	170.2	115.3	107.3	
COMMENTCanadian concurrence received; channel reserved for future use																			
339.7	159.6	WTLI	CP	BPED961122MA	Bear Cree	MI A	45.1012	84.4504	2ND	207C2	H	6.0V	393	18.9	51.1	16.9	56.1	63.3	W W
COMMENTVertical Polarization Only																			

 *** NORMAL TERMINATION FM CHANNEL SEARCH NO. 5 *** 57 FM RECORDS WERE CONSIDERED, OF WHICH 5 WERE PRINTED ABOVE ***

***** FM CHANNEL SEARCH NO. 6 - LECHMAN & JOHNSON, INC. GAITHERSBURG, MARYLAND - 20-AUG-98 19:06:32 *****
 ***** LAST UPDATE: 090817 *****

NEW 206 A FX POLARIZATION ERF (KW) HAAT RCAMSL
 GAYLORD MI US HOR PLN BM TILT (METER) (METER)
 45.0140 84.4035 (D.MMSS) HORIZONTAL 5.000 0.000 100.0
 VERTICAL 5.000 0.000 100.0

***** CONTOUR CALCULATIONS BASED UPON MAXIMUM HAATs *****

* TV CHANNEL 6 STUDY *
 * GRADE B = 47 DBU *

AZIMUTH (DEGREES)	CALL	FILE NUMBER	SERV STAT	CITY	ST C	DB.MMSS	DDD.MMSS	ERP (KW)	HAAT METER	TV GRADEB (KM)	TV DIST (KM)	FMTOTV RQDIST (KM)	FMTOTV CO-LO (KM)	F5050 (DBU)
72.9	253.3 WCML	BLET394	TVLIC	ALPENA	MI A	45.081	84.0944	100	475.	118.1	42.3	211.0		78.4

THE CANADIAN BORDER IS 121.4 KM ON A BEARING OF 43.4 DEG. TRUE

AZIMUTH FROM TO	CALL	STS	FILE NUMBER	CITY	ST C	LAT (D.MMSS)	LONG REL CHN	ERP (KW) HORZ VERT	HAAT (M)	D	I-CON F5010 (KM)	F-CON F5050 (KM)	DIST (KM)	IR RSEP (KM)	IC RSEP (KM)	REZLT IR IC
224.8	44.1 WIAA	LIC	BLED900105KB	Interloch	MI A	44.1633	85.4249 2ND 204C	100.H100.V	402		39.9	79.9	117.3	77.1	92.1	
32.4	213.2	VAC		Thessalon	ON C	46.1500	83.3300 1ST 205B	H V 0					161.7	149.		
156.5	337.1	VAC		Bay City	MI A	43.3714	83.5001 00 206R	H V 0			137.7	52.2	170.2	174.9	150.4	5
COMMENTCanadian concurrence received; channel reserved for future use																
157.7	338.2	WTRK	LIC	BLED930810KA	Bay City	MI A	43.3504	83.5136 00 206A	2.0H 2.0V	100	69.8	22.1	173.1	107.0	120.3	
339.7	159.6	WTLL	CP	BPED961122MA	Bear Cree	MI A	45.1012	84.4504 1ST 207C2	H 6.0V	393	76.2	51.1	16.9	113.4	106.3	W W
COMMENTVertical Polarization Only																
108.3	289.0	NEW	CP	BPED970828MO	Harrisvil	MI A	44.4724	83.4057 3RD 209C2	H 31.V	165	5.5	49.8	82.8	42.7	53.3	
COMMENTVertical Polarization Only																

*** NORMAL TERMINATION FM CHANNEL SEARCH NO. 6 *** 61 FM RECORDS WERE CONSIDERED, OF WHICH 6 WERE PRINTED ABOVE ***

***** FM CHANNEL SEARCH NO. 7 - LECHMAN & JOHNSON, INC. GAITHERSBURG, MARYLAND - 20-AUG-98 19:07:02 *****
 ***** LAST UPDATE: 980817 *****

		207 A	FX	POLARIZATION	ERP (KW)		HAAT	RCANSL
					HOR PLN	BM TILT	(METER)	(METER)
WYLDOR MI	US			HORIZONTAL	6.000	0.000	100.0	
85.0140	84.4035 (D.MSS)			VERTICAL	6.000	0.000	100.0	

***** CONTOUR CALCULATIONS BASED UPON MAXIMUM HAATs *****

 * TV CHANNEL 6 STUDY *
 * GRADE B = 47 DBU *

AZIMUTH (DEGREES)	CALL	FILE NUMBER	SERV STAT	CITY	ST C	DD.MMSS	DDD.MMSS	ERP (KW)	TV HAAT METER	TV GRADEB (KM)	FMTOTV DIST (KM)	FMTOTV RODIST (KM)	FMRP CO-LO (KW)	TVATFM F5050 (DBU)
72.9	253.3 WCML	BLET394	TVLIC	ALPENA	MI A	45.0817	84.0944	100	475.	118.1	42.3	196.0		78.4

 THE CANADIAN BORDER IS 121.4 KM ON A BEARING OF 43.4 DEG. TRUE

AZIMUTH FROM	TO	CALL	STS	FILE NUMBER	CITY	ST C	LAT (D.MMSS)	LONG	REL CHN	ERP (KW) HORZ VERT	HAAT (M)	D I-CON A F5010	P-CON F5050	IR DIST (KM)	IC RSEP (KM)	REZLT RSEP (KM)
224.8	44.1	WIAA	LIC	BLED900105KB	Interloch	MI A	44.1633	85.4249	3RD 204C	100.H100.V	402	11.6	79.9	117.3	48.8	83.4
156.5	337.1		VAC		Bay City	MI A	43.3714	83.5001	1ST 206B	H V 0	78.1	52.2	170.2	115.3	107.3	
COMMENTCanadian concurrence received; channel reserved for future use																
256.5	74.2	WPNEFM	LIC	BHLED970521KE	Green Bay	MI A	44.2435	88.0005	CO 207C1	100.B100.B	334	176.1	74.9	272.3	213.3	173.1
339.7	159.6	WTLI	CP	BPED961122MA	Bear Cree	MI A	45.1012	84.4504	CO 207C2	H 6.0V	393	124.5	51.1	16.9	161.7	149.3 W W
COMMENTVertical Polarization Only																
57.5	239.6		VAC		Espanola	ON C	46.1500	81.4900	CO 207B	H V 0				261.0	223.	
182.7	2.7	WCMUHF	LIC	BLED1085	Mount Ple	MI A	43.3424	84.4621	1ST 208C1	100.H100.V	154	88.6	59.0	161.8	125.8	114.1
9.8	190.1	CBSMFH	DPE		Sault Ste	ON C	46.3550	84.1653	1ST 208B	46.H 46.V	117			177.1	149.	
108.3	289.0	NEW	CP	BPED970828MO	Harrisvil	MI A	44.4724	83.4057	2ND 209C2	H 31.V	165	18.5	49.8	82.8	55.7	62.0
COMMENTVertical Polarization Only																
250.6	69.9	WLJNFM	LIC	BLED931126KA	Traverse	MI A	44.4636	85.3943	3RD 210C2	12.5H12.5V	222	4.8	46.6	82.7	42.0	50.1

*** NORMAL TERMINATION FM CHANNEL SEARCH NO. 7 *** 67 FM RECORDS WERE CONSIDERED, OF WHICH 9 WERE PRINTED ABOVE ***

***** FM CHANNEL SEARCH NO. 8 - LECHMAN & JOHNSON, INC. GAITHERSBURG, MARYLAND - 20-AUG-98 19:07:33 *****
 ***** LAST UPDATE: 980817 *****

NEW	208 A	FX	POLARIZATION	ERP (KW)	HAAT	RCANSL
WYLDOR MI	US			HOR PLN	BM TILT	(METER)
45.0140	84.4035	(D.MMSS)	HORIZONTAL	6.000	0.000	100.0
			VERTICAL	6.000	0.000	100.0

***** CONTOUR CALCULATIONS BASED UPON MAXIMUM HAATs *****

 * TV CHANNEL 6 STUDY *
 * GRADE B = 47 DBU *

AZIMUTH	CALL	FILE NUMBER	SERV STAT	CITY	ST C	DD.MMSS	DDD.MMSS	TV ERP (KW)	TV HAAT (METER)	TV GRADEB (KM)	FMTOTV DIST (KM)	FMTOTV RODIST (KM)	FNERP (KW)	TVATFM CO-LO (DBU)
72.9	253.3	WCML	BLET394	TVLIC	ALPENA	MI A	45.0817	84.0944	100	475.	118.1	42.3	196.0	78.4

 THE CANADIAN BORDER IS 121.4 KM ON A BEARING OF 43.4 DEG. TRUE

AZIMUTH	FROM	TO	CALL	STS	FILE NUMBER	CITY	ST C	LAT (D.MMSS)	LONG	REL CHN	ERP (KW)	HAAT (M)	D I-CON	P-CON	IR	IC	REZLT	
339.7	159.6	WTLI	CP	BPED961122MA	Bear Cree	MI A	45.1012	84.4504	1ST	207C2	H 6.0V	393	76.2	51.1	16.9	113.4	106.2	W W
COMMENTVertical Polarization Only																		
182.7	2.7	WCMUFM	LIC	BLED1085	Mount Ple	MI A	43.3424	84.4621	CO	208C1	100.H100.V	154	155.5	59.0	161.8	192.7	157.2	S C
9.8	190.1	CBSMFM	OPE		Sault Ste	ON C	46.3550	84.1653	CO	208B	46.H 46.V	117			177.1	223.		S
108.3	289.0	NEW	CP	BPED970828MO	Harrisvil	MI A	44.4724	83.4057	1ST	209C2	H 31.V	165	73.7	49.8	82.8	110.9	104.9	S S
COMMENTVertical Polarization Only																		
250.6	69.9	WLJNFM	LIC	BLED931126KA	Traverse	MI A	44.4636	85.3943	2ND	210C2	12.5H12.5V	222	16.9	46.6	82.7	54.1	58.8	

 *** NORMAL TERMINATION FM CHANNEL SEARCH NO. 8 *** 64 FM RECORDS WERE CONSIDERED, OF WHICH 5 WERE PRINTED ABOVE ***

***** FM CHANNEL SEARCH NO. 9 - LECHMAN & JOHNSON, INC. GAITHERSBURG, MARYLAND - 20-AUG-98 19:08:03 *****

 LAST UPDATE: 980817 *****

NEW	209 A	FX	POLARIZATION	ERP (KW)		HAAT	RCAMSL
GAYLORD MI	US			HOR PLN	BM TILT	(METER)	(METER)
45.0140	84.4035	(D.MMSS)	HORIZONTAL	6.000	0.000	100.0	
			VERTICAL	6.000	0.000	100.0	

***** CONTOUR CALCULATIONS BASED UPON MAXIMUM HAATs *****

 * TV CHANNEL 6 STUDY *
 * GRADE B = 47 DBU *

AZIMUTH	CALL	FILE NUMBER	SERV STAT	CITY	ST C	DD.MMSS	DDD.MMSS	TV ERP (KW)	TV HAAT (METER)	TV GRADEB (KM)	FMTOTV DIST (KM)	FMTOTV RQDIST (KM)	FMRP CO-LO (KM)	TVATFM F5050 (DBU)
72.9	253.3 WCLM	BLET394	TVLIC	ALPENA	MI A	45.0817	84.0944	100	475.	118.1	42.3	196.0		78.4

 THE CANADIAN BORDER IS 121.4 KM ON A BEARING OF 43.4 DEG. TRUE

AZIMUTH	FROM	TO	CALL	STS	FILE NUMBER	CITY	ST C	LAT (D.MMSS)	LONG	REL CHN	ERP (KW)	HAAT (M)	D	I-CON F5010 (KM)	P-CON F5050 (KM)	IR DIST (KM)	IC RSEP (KM)	REZLT IR IC	
339.7	159.6	WTLI	CP		BPED961122MA	Bear Cree	MI A	45.1012	84.4504	2ND 207C2	H	6.0V	393	18.9	51.1	16.9	56.1	63.3	W W
COMMENTVertical Polarization Only																			
182.7	2.7	WCMUFM	LIC		BLED1085	Mount Ple	MI A	43.3424	84.4621	1ST 208C1	100.H	100.V	154	88.6	59.0	161.8	125.8	114.1	
9.8	190.1	CBSMFM	OPE			Sault Ste	ON C	46.3550	84.1653	1ST 208B	46.H	46.V	117			177.1	149.		
108.3	289.0	NEW	CP		BPED970828MO	Harrisvil	MI A	44.4724	83.4057	CO 209C2	H	31.V	165	129.1	49.8	82.8	166.3	148.0	S S
COMMENTVertical Polarization Only																			
277.9	96.2	WAQB	CP		BPED961003MA	Sister Ba	WI A	45.1416	87.0528	CO 209C3	3.4H	3.4V	167	88.1	31.3	191.4	125.3	129.5	
COMMENTProposed as Class B1 to Canada 970304-Accepted by Canada 97040																			
250.6	69.9	WLJNFM	LIC		BLED931126KA	Traverse	MI A	44.4636	85.3943	1ST 210C2	12.5H	12.5V	222	69.0	46.6	82.7	106.2	101.7	S S

 *** NORMAL TERMINATION FM CHANNEL SEARCH NO. 9 *** 65 FM RECORDS WERE CONSIDERED, OF WHICH 6 WERE PRINTED ABOVE ***

***** FM CHANNEL SEARCH NO. 10 - LECHMAN & JOHNSON, INC. GAITHERSBURG, MARYLAND - 20-AUG-98 19:08:33 *****
 ***** LAST UPDATE: 980817 *****

NEW	210 A	FX	POLARIZATION	ERP (KW)	HAAT	RCANSL
GAYLORD MI	US			HOR PLN	BM TILT	(METER)
45.0140	84.4035	(D.MHSS)	HORIZONTAL	6.000	0.000	100.0
			VERTICAL	6.000	0.000	100.0

***** CONTOUR CALCULATIONS BASED UPON MAXIMUM HAATs *****

* TV CHANNEL 6 STUDY *
 * GRADE B = 47 DBU *

AZIMUTH	CALL	FILE NUMBER	SERV STAT	CITY	ST C	DD.MHSS	DDD.MHSS	TV ERP (KW)	TV HAAT (METER)	TV GRADEB (KM)	FMTOTV DIST (KM)	FMTOTV RQDIST (KM)	FNERP (KW)	TVATFM CO-LO (DBU)
72.9	253.3	WCLM	BLET394	TVLIC	ALPENA	MI A	45.0817	84.0944	100	475.	118.1	42.3	196.0	78.4

 THE CANADIAN BORDER IS 121.4 KM ON A BEARING OF 43.4 DEG, TRUE

AZIMUTH	FROM	TO	CALL	STS	FILE NUMBER	CITY	ST C	LAT (D.MHSS)	LONG	REL CHN	ERP (KW)	HAAT (M)	D I-CON	P-CON	IR	IC	REZLT
ABNORMAL RETURN FROM B_TABLE, SEPARATION SET TO 306. KM																	
339.7	159.6	WTLI	CP		BPED961122MA	Bear Cree	MI A	45.1012	84.4504	3RD 207C2	H 6.0V	393	4.5	51.1	16.9	41.7	54.6 W W
COMMENTVertical Polarization Only																	
108.3	289.0	NEW	CP		BPED970828MO	Harrisvil	MI A	44.4724	83.4057	1ST 209C2	H 31.0V	165	73.7	49.8	82.8	110.9	104.9 S S
COMMENTVertical Polarization Only																	
250.6	69.9	WLJNFM	LIC		BLED931126KA	Traverse	MI A	44.4636	85.3943	CO 210C2	12.5H12.5V	222	116.3	46.6	82.7	153.5	144.8 S S
38.5	219.5		VAC			Iron Brid	ON C	46.1600	83.1433	CO 210A	H V 0				177.3	180.	S
350.9	170.7	NEW	APP		BPED980430MC	Trout Lak	MI A	46.1117	84.5646	CO 210A	0.50H0.50V	136	57.7	18.2	130.7	94.9	116.4
CUT-OFF DATE = 09/09/98 **COMMENT																	
72.9	253.3	WPHN	LIC		BLED850419LP	Gaylord	MI A	45.0817	84.0944	3RD 213C	100.H100.0V	331	10.6	74.7	42.3	47.8	78.2 S W
14.8	195.6		ADD			Chapleau	ON C	47.4931	83.3437	IF 264A1	H V 0				322.2	306.	
COMMENTProposed as Class A1 by Canada 971022-Accepted by Commission 9																	

 *** NORMAL TERMINATION FM CHANNEL SEARCH NO. 10 *** 65 FM RECORDS WERE CONSIDERED, OF WHICH 7 WERE PRINTED ABOVE ***
